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Amendments to the Claims:

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1. (Currently Amended) A method of controlling wireless data transmission from a mobile terminal unit to a receiving system, wherein:

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- a) the terminal unit transmits data to a network via a short-range radio technology in a first mode and monitors quality of the communication link and automatically switches to a second mode [[if]] in response to the quality of the communication link via the short-range radio technology falls falling below a first predetermined threshold;
- b) the terminal unit transmits data to the network via a long-range radio technology while monitoring the quality of the communication link via the first mode and automatically switches to the first mode as soon as the quality of the communication link via the short-range radio technology is above a second predetermined threshold;
- c) on switching from one mode to the other, the communication link via the radio technology of the previous mode is maintained until the link is established via the radio technology of the subsequent mode.
- 2. (Previously Presented) A method according to claim 1, wherein the quality of the communication link via the short-range radio technology is determined by the signal strength, the error rate and/or the signal to noise distance of the communication link.
- 3. (Previously Presented) A method according to claim 1, wherein the short-range radio technology is based on the Bluetooth protocol.
- 4. (Previously Presented) A method according to claim 1, wherein the long-range radio technology is based on a WLAN standard.
- 5. (Previously Presented) A method according to claim 1, wherein the terminal unit has sensors for measuring physiological parameters of a patient.

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- 6. (Currently Amended) A method according to claim 1, wherein the communication via the various short range radio technology ies is carried out using stations of the receiving system that are spatially separated from stations of the long range radio technology.
- 7. (Previously Presented) A method according to claim 1, wherein when switching between two radio technologies, the transmitted data streams are synchronized.
- 8. (Previously Presented) A patient monitoring system for mobile acquisition of a patient's physiological parameters, comprising a mobile terminal unit and a receiving system, which is arranged to carry out a method according to claim 1.
- 9. (Currently Amended) A patient monitoring system according to claim 8, wherein the receiving system comprises a first station with which the terminal unit can communicate via [[a]] the short-range radio technology, and a second station with which the terminal unit can communicate via the long-range radio technology.
- 10. (Previously Presented) A patient monitoring system according to claim 9, wherein the first and second stations are networked.
- 11. (New) A patient monitoring system for mobile acquisition of a patient's physiological parameters, comprising:
- at least one mobile terminal unit which acquires the patient's physiological parameters, the mobile terminal unit being configured to:
 - transmit physiological parameter data to a network via a short range radio technology in a first mode while monitoring a quality of a communication link via the short range radio technology, and switch to a second mode in response to the quality of the communication link via the short range radio technology falling below a first predetermined threshold, and

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transmit the physiological parameter data via a long range radio technology in the second mode while monitoring the quality of the communication link via the short range radio technology and switch automatically back to the first mode as soon as the quality of the communication link via the short range radio technology is above a second predetermined threshold, and

maintain the communication link via the short range radio technology until the communication link is established via the long range radio technology when switching from the first mode to the second mode, and maintain the communication link established via the long range radio technology until the communication link is established via the short range radio technology when switching from the second mode to the first mode, such that at least one communication link is always maintained; and

a receiving system which receives the physiological parameter data from the at least one mobile terminal unit, the receiving system including:

a first station which communicates via the at least one mobile terminal unit via the short range radio technology, and

a second station which communicates with the at least one mobile terminal unit via the long range radio technology.

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